

## SEARCH REQUEST FORM

Scientific and Technical Information Center

93

Requester's Full Name: KEVIN NGUYEN Examiner #: 73893 Date: 05/20/04  
 Art Unit: 2173 Phone Number 305 3972 Serial Number: 09/632154  
 Mail Box and Bldg/Room Location: 4X02 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: SYSTEM & METHOD FOR ENABLING USERS TO INTERACT  
IN A VIRTUAL SPACE

Inventors (please provide full names): LEATH ET AL.

Earliest Priority Filing Date: provisional application # 60/020,296 filed on  
NOV 13 1995

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Free space game, on line game  
 massive multiplayer on line game.  
 How to handle displaying people or player  
 on-screen.

Attached is a claims

Please expedite

Kristine Vincaid

SPE AU 2174

## STAFF USE ONLY

Staff Use Only	Type of Search	Vendors and cost where applicable
Searcher: <u>David K. Hower</u>	NA Sequence (#) _____	STN _____
Searcher Phone #: <u>305 7794</u>	AA Sequence (#) _____	Dialog _____
Searcher Location: <u>CPR-4B30</u>	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: <u>5-24-04</u>	Bibliographic <u>✓</u>	Dr. Link _____
Date Completed: <u>5-24-04</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>60</u>	Fulltext <u>✓</u>	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>190</u>	Other _____	Other (specify) _____



# **STIC Search Report**

## **EIC 2100**

**STIC Database Tracking Number: 122656**

**TO: Kevin Nguyen**  
**Location: 4Y02**  
**Art Unit : 2173**  
**Monday, May 24, 2004**

**Case Serial Number: 09/632154**

**From: David Holloway**  
**Location: EIC 2100**  
**PK2-4B30**  
**Phone: 308-7794**

**david.holloway@uspto.gov**

### **Search Notes**

Dear Examiner Nguyen,

Attached please find your search results for above-referenced case.  
Please contact me if you have any questions or would like a re-focused search.

David

Set	Items	Description
S1	467894	COMPUTER? OR VIDEO? OR VR OR VIRTUAL()REALIT? OR WEB OR WWW OR WORLDWIDWEB OR ONLINE? OR ON()LINE? OR CLIENT()SERVER? OR INTERNET?
S2	16850	(GRAPHIC? OR IMAGE? OR ICON OR ICONS OR PICTURE? OR 3D)(N)-(CHARACTER? OR INDIVIDUAL? OR PLAYER? OR PROTAGANIST?) OR AV-ATAR? OR SPRITE? OR GENIE?
S3	14597	MULTIUSER? OR ROLE()PLAYING OR MUD OR MOO OR (MULTI OR MULTIPLE OR PLURAL)()USER()ROLE? OR (MULTI OR MULTIPLE OR PLURAL- )()USER() (DUNGEON? OR DIMENSION?)
S4	345345	NETWORKED OR SHARED() (SPACE OR DIMENSION?) OR ONLINE OR ON-()LINE OR INTERNET? OR WWW OR CLIENT()SERVER? OR REMOTE? OR W-ORLDWIDWEB OR WEB OR VIRTUAL OR VR
S5	127	S1 AND S2 AND S3 AND S4
S6	13	S5 NOT PY>1995

File 348:EUROPEAN PATENTS 1978-2004/May W03  
(c) 2004 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20040520,UT=20040513  
(c) 2004 WIPO/Univentio

6/3,K/8 (Item 4 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

00262475 \*\*Image available\*\*

SPRYTE RENDERING SYSTEM WITH IMPROVED CORNER CALCULATING ENGINE AND  
IMPROVED POLYGON-PAINT ENGINE  
SYSTEME DE RENDU D'OBJETS GRAPHIQUES COMPORTANT UN MOTEUR AMELIORE POUR LE  
CALCUL DES ANGLES ET UN MOTEUR AMELIORE POUR LE REMPLISSAGE DE  
POLYGONES

Patent Applicant/Assignee:

THE 3DO COMPANY,

Inventor(s):

NEEDLE David Lewis,  
MICAL Robert Joseph,  
LANDRUM Stephen Harland,  
GRAY Donald Milton III,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9410644 A1 19940511

Application: WO 92US9462 19921102 (PCT/WO US9209462)

Priority Application: WO 92US9462 19921102

Designated States: AT AU BB BG BR CA CH CS DE DK ES FI GB HU JP KP KR LK LU  
MG MN MW NL NO PL RO RU SD SE AT BE CH DE DK ES FR GB GR IE IT LU MC NL  
SE BF BJ CF CG CI CM GA GN ML MR SN TD TG

Publication Language: English

Fulltext Word Count: 45439

Fulltext Availability:

Detailed Description

Detailed Description

... listings can be implemented in a number of ways,  
including but not limited to: a **computer** program,  
code, in a ROM,, and so forth. The same code  
micro  
conversion or other...

...and/or sequential state machines.

Since implementations of the listings which are deemed to  
be " **computer** programs ll are protectable under copyright  
law, copyrights not otherwise waived above in said  
listings...

...This reservation includes  
the right to reproduce the listings in the form of  
machine-executable **computer** programs.

2b. Cross Reference to Related Applications

This application is related to.

PCT Patent Application Serial No.

entitled AUDIO/ VIDEO **COMPUTER** ARCHITECTURE, by inventors  
Mical et al., filed concurrently herewith, Attorney  
Docket No. MDIO4222, and also...

...inventors and also filed concurrently herewith;  
PCT Patent Application Serial No.

entitled RESOLUTION ENHANCEMENT FOR VIDEO DISPLAY USING  
MULTI-LINE INTERPOLATION,, by inventors Mical et al,,,  
filed concurrently herewith, Attorney Docket...data in its entirety,  
store the generated frame data in high speed memory  
(e.g., video RAM) and transfer each complete frame  
(background plus airplane) to the display means at an...

...generates the sequential frames

of image data.

A better approach relies on the concept of **sprite** painting. One area of memory stores nonchanging, background image data and a second area of...

...mapped copy onto a destination grid with or without changes of color.

High-performance electronic **computer** systems are available for transforming image data in such a manner.

The Silicon Graphics Iris...

...the task of performing all calculations that define transformations of image data.

These high-performance **computer** systems suffer from drawbacks such as excessive cost, large circuit size,, complexity and/or slow...is also to be read as meaning that a physical storage medium (e.g., a **Video** -speed Random Access Memory unit) is provided for storing image data signals representing attributes (e...to the term **l1spryte**,11

Conventional

imaging systems are built around the concept of a "**sprite**". The different spelling for the earlier mentioned **l1spryte**" is intentional. A conventional "**sprite**" consists of a rectangularly-shaped area of image data. All scan lines of a conventional **sprite** have the same length. It has been found through experience that internal change of data contents within a **sprite** predominantly take place within non-rectangular subportions of the rectangular **sprite** areas. Time and memory is wasted in conventional systems by repeatedly rendering the nonchanging subportion...

...construct that is referred to as a **l1spryte**". (Note the pronunciation is the same as "**sprite**" but the spelling is different.) A **l1sprytell** is defined as a compilation ...this disclosure. (The spelling of **spryte** with a **lly**" instead of the industry recognized spelling "**sprite**" is intentional and has already been explained above.) Coordinates **Xa0** and **Yao** are each expressed...more detailed description of the Bresenham and other line approximating algorithms may be found in "**Computer** Graphics, Principles and Practice" by J, Foley, A. Van Dam, S. Feiner and J. Hughes...image rendering system 400 in accordance with the invention that uses the above concepts.

A **video** random-access memory subunit (VRAM) 410 is provided within a system memory unit 405. (Memory...because a hole is created through them

(or conversely, suddenly made non-transparent to simulate **mud** or paint thrown on a window) . In such cases, the color-map control signals 415...to FIFO 609\*

Totally literal (TLF) **sprytes** have rectangular formats similar to that of conventional **sprites** , (Each row is of a same number of pixels.) The rectangle dimensions are specified in...reach a next in stream multiplexer 564. The "Dolores-fetch" address signals enter multiplexer 564 on line 565. A dolo-fetch address signal is routed back from translator 570 when the R...be alternatively implemented in the form of a ROM (read only memory) circuit or a **computer** program or the like, (Copyright Notice: In so far that the subject

matter of the...

6/3,K/5 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

00300942 \*\*Image available\*\*

**VIEWING IMAGED OBJECTS FROM SELECTED POINTS OF VIEW**  
**VISUALISATION D'OBJECTS MIS EN IMAGES A PARTIR DE POINTS DE VUE**  
**SELECTIONNES**

Patent Applicant/Assignee:

FUISZ Richard C,  
BATTIST Gerald E,

Inventor(s):

FUISZ Richard C,  
BATTIST Gerald E,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9519093 A1 19950713

Application: WO 95US303 19950109 (PCT/WO US9500303)

Priority Application: US 94179383 19940110; US 94366890 19941230

Designated States: CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 5598

Fulltext Availability:

Detailed Description  
Claims

English Abstract

...22) under user direction (24) using the known relative position information, to construct a displayable **individual image** or sequence of images of the object as if taken from a user selected point...

Detailed Description

... and display those

images on a display 26 comprising either a monitor 28 or a **virtual reality** type display helmet 30.

Alternatively, in response to actuation of the device 24, the user to

select for viewing an **individual image** or sequence of images of the object 18 from a selected point of view 33...

...decreases. Thus, less image data will be needed by the processor 22 in constructing the **individual image** or sequence of images.

When zooming out, the constructed or taken sequences of images or...image buffer 23 for sequentially storing for a predetermined time delay prior to display the **individual images** as constructed and/or output from the processor. Storage of the images in the buffer...of a recorded scene such as would be necessary in participating in an interactive or **role playing** game (e.g., mystery/detective or combat game).

Although preferred embodiments of the method and...

Claim

... device for simultaneously transmitting recorded images synchronized in accordance with a time of recording;  
a **computer** processor for processing said simultaneously transmitted images to construct an image of the object taken...

...from any of the camera points of view;  
a viewer interactive device connected to said

822885

**computer** processor for selecting the point of view for the constructed image; and  
a device for...

...object includes data of an unwanted portion of the image of the object and the **computer** processor includes means for subtracting the data associated with the unwanted portion from the image...



Set	Items	Description
S1	5418021	COMPUTER? OR VIDEO? OR VR OR VIRTUAL()REALIT? OR WEB OR WWW OR WORLDWIDWEB OR ONLINE? OR ON()LINE? OR CLIENT()SERVER? OR INTERNET?
S2	206706	(GRAPHIC? OR IMAGE? OR ICON OR ICONS OR PICTURE? OR 3D) (N)-(CHARACTER? OR INDIVIDUAL? OR PLAYER? OR PROTAGANIST?) OR AV-ATAR? OR SPRITE? OR GENIE?
S3	71317	MULTIUSER? OR ROLE()PLAYING OR MUD OR MOO OR (MULTI OR MULTIPLE OR PLURAL)()USER()ROLE? OR (MULTI OR MULTIPLE OR PLURAL)()USER() (DUNGEON? OR DIMENSION?)
S4	1612498	NETWORKED OR SHARED() (SPACE OR DIMENSION?) OR ONLINE OR ON-()LINE OR INTERNET? OR WWW OR CLIENT()SERVER? OR REMOTE? OR WORLDWIDWEB OR WEB OR VIRTUAL OR VR
S5	54	S1 AND S2 AND S3 AND S4
S6	13	S5 NOT PY>1995

?show files

File 8: Ei Compendex(R) 1970-2004/May W3  
(c) 2004 Elsevier Eng. Info. Inc.

File 35: Dissertation Abs Online 1861-2004/Apr  
(c) 2004 ProQuest Info&Learning

File 202: Info. Sci. & Tech. Abs. 1966-2004/May 14  
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File 65: Inside Conferences 1993-2004/May W4  
(c) 2004 BLDSC all rts. reserv.

File 2: INSPEC 1969-2004/May W3  
(c) 2004 Institution of Electrical Engineers

File 94: JICST-EPlus 1985-2004/May W1  
(c) 2004 Japan Science and Tech Corp(JST)

File 111: TGG Natl. Newspaper Index(SM) 1979-2004/May 24  
(c) 2004 The Gale Group

File 233: Internet & Personal Comp. Abs. 1981-2003/Sep  
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File 6: NTIS 1964-2004/May W4  
(c) 2004 NTIS, Intl Cpyrght All Rights Res

File 144: Pascal 1973-2004/May W3  
(c) 2004 INIST/CNRS

File 34: SciSearch(R) Cited Ref Sci 1990-2004/May W3  
(c) 2004 Inst for Sci Info

File 99: Wilson Appl. Sci & Tech Abs 1983-2004/Apr  
(c) 2004 The HW Wilson Co.

File 95: TEME-Technology & Management 1989-2004/May W2  
(c) 2004 FIZ TECHNIK

6/5/5 (Item 5 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.

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00336015 94PV01-006

**Adventures** online : **role-play via modem**

Lee, Tosca Moon

PC Novice , January 1, 1994 , v5 n1 p32-35, 4 Page(s)

ISSN: 1052-1186

Company Name: CompuServe; America Online ; GENie ; ImagiNation  
Network; Delphi

Languages: English

Document Type: Feature Articles and News

Geographic Location: United States

Discusses **role playing** games **online** . Says that all of the major **online** services offer **role playing** games through forums or message boards. The games can take place with a storyteller (lasting about two hours) or without (running five to six hours). The play is text-based with emoticons (such as :) read sideways for happy) and actions set off by colons. Combat between players (popular with the 80% male audience) is usually decided by the roll of dice. The advantages of **online role playing** are: the ability to play at any time; the opportunity to play any character you would like; the more intense emotions and character development that come with physical detachment; and the more intense relationships formed by getting to know each other as intellects. Disadvantages are: the heavy reliance on reading and writing skills; **online** costs from \$65-\$400 per month; and the addictive qualities of the games. Contains two screen displays, four sidebars, and one photo. (GEC)

Descriptors: Games; Online Systems; Fantasy; War Games; Science Fiction

Identifiers: CompuServe; America Online ; GENie ; ImagiNation  
Network; Delphi

6/5/1 (Item 1 from file: 233)  
DIALOG(R)File 233:Internet & Personal Comp. Abs.  
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00387841 95NG06-004

**Cyberguide: Arcade -- A whole new world, a dog's life, bio-gaming and galactic battles at these four R&R sites**

NetGuide , June 1, 1995 , v2 n6 p81-82, 2 Page(s)

ISSN: 1078-4632

Company Name: Delphi; **Genie**

Product Name: Realms **MUD** ; Drool; Guess the Macromolecule; Stellar Emperor

Languages: English

Document Type: Buyer and Vendor Guide

Geographic Location: United States

Presents a guide to four electronic **online** games. Includes addresses and descriptions of the following: Realms **MUD** , an interactive adventure on the **Internet** ; Drool, an innovative game where the character is a dog fetching a stick on the World Wide **Web** ( **WWW** ); Guess the Macromolecule, a molecular game of charades on the **WWW** ; and Stellar Emperor, an intergalactic sequel to Stellar Conquest on Delphi and **Genie** . Includes three screen displays. (CH)

Descriptors: Games; **Internet** ; **Online Systems** ; Vendor Guide; Adventure; Science Fiction

Identifiers: Realms **MUD** ; Drool; Guess the Macromolecule; Stellar Emperor; Delphi; **Genie**

6/5/2 (Item 2 from file: 233)  
DIALOG(R)File 233:Internet & Personal Comp. Abs.  
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00381125 95NG04-005

**Cyberguide: arcade -- With board games, dragons and more challenges on the 10 sites, how can you lose?**

NetGuide , April 1, 1995 , v2 n4 p83-88, 4 Page(s)

Company Name: Delphi; **GENie**

Product Name: American **Internet** Chess Server, The; Thunder Dome II - Rise of the Free Jacks; Genesis; **Mud** II; Hundred Years War

Languages: English

Document Type: Buyer and Vendor Guide

Geographic Location: United States

Presents a buyer's guide to 10 electronic games available for download or **online** play. Includes a short review of each of the following: The American **Internet** Chess Server, on Telnet; Thunder Dome II - Rise of the Free Jacks, on Telnet; Genesis, on Telnet; **Internet** Multimedia Research Foundation's Choose Your Own Adventure Story, on the World Wide **Web** ; **Mud** II, on Delphi and **GENie** ; Hundred Year's War, on **GENie** ; Dragon's Gate, on **GENie** ; Fates of Twinion, on ImagiNation; and Stratego, on ImagiNation. Includes site addresses and a description of each game. Includes five screen displays. (CH)

Descriptors: Electronic Games; **Internet** ; **Computer Bulletin Board Systems** ; **Online** Information; Vendor Guide; World Wide **Web** ; Entertainment

Identifiers: American **Internet** Chess Server, The; Thunder Dome II - Rise of the Free Jacks; Genesis; **Mud** II; Hundred Years War; Delphi; **GENie**

6/5/4 (Item 4 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.

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00361047 94CO09-016

**Modem combat**

Broida, Rick

COMPUTE , September 1, 1994 , v16 n9 p86-90, 4 Page(s)

ISSN: 0194-357X

Company Name: America **Online** ; CompuServe; **GENie** ; ImagiNation  
Network, The; Prodigy Services

Languages: English

Document Type: Feature Articles and News

Geographic Location: United States

Overviews gaming services that are available from the major **online** services including America **Online** , CompuServe, **GENie** , Prodigy, and the ImagiNation Network. Says that America **Online** includes one of the smallest selections of **online** games. Remarks that CompuServe offers an amazing array of game choices, including an entire forum devoted to modem play. **GENie** offers more than a dozen **multiuser** games and gameplay is free as part of **GENie** 's standard service plan. Says **GENie** 's CyberStrike, a **virtual reality** combat game, is probably the best multiplayer game to date on any **online** service. Notes that the ImagiNation Network is the most entertainment-oriented of the services and contains a stunning, easy to use graphical interface. States that Prodigy includes no head-to-head multiplayer games but does have a portal to INN (at a cost of \$3.60 per hour). Prodigy does include several one-player games. Contains five screen displays and two reference tables. (HHW)

Descriptors: Games; Modem; **Online** Systems; Entertainment

Identifiers: America **Online** ; CompuServe; **GENie** ; ImagiNation  
Network, The; Prodigy Services

Set	Items	Description
S1	467894	COMPUTER? OR VIDEO? OR VR OR VIRTUAL()REALIT? OR WEB OR WWW OR WORLDWIDWEB OR ONLINE? OR ON()LINE? OR CLIENT()SERVER? OR INTERNET?
S2	16850	(GRAPHIC? OR IMAGE? OR ICON OR ICONS OR PICTURE? OR 3D) (N)-(CHARACTER? OR INDIVIDUAL? OR PLAYER? OR PROTAGANIST?) OR AV-ATAR? OR SPRITE? OR GENIE?
S3	14597	MULTIUSER? OR ROLE()PLAYING OR MUD OR MOO OR (MULTI OR MULTIPLE OR PLURAL)()USER()ROLE? OR (MULTI OR MULTIPLE OR PLURAL)()USER() (DUNGEON? OR DIMENSION?)
S4	345345	NETWORKED OR SHARED() (SPACE OR DIMENSION?) OR ONLINE OR ON-()LINE OR INTERNET? OR WWW OR CLIENT()SERVER? OR REMOTE? OR WORLDWIDWEB OR WEB OR VIRTUAL OR VR
S5	127	S1 AND S2 AND S3 AND S4
S6	13	S5 NOT PY>1995

File 348:EUROPEAN PATENTS 1978-2004/May W03  
(c) 2004 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20040520,UT=20040513  
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Set	Items	Description
S1	27917	(MULTIPL? OR PLURAL? OR MANY OR SEVERAL OR GROUP) (2N) (PLAY- ER? OR PARTICIPANT? OR USER? OR GAMER?)
S2	9474	S1 AND (GAME? OR VIDEOGAME? OR MOO OR MUD OR MUX OR MUSH OR MUCK OR DOMAIN? OR DUNGEON?)
S3	997	S2 (10N) (AVATAR? OR SPRITE? OR ICON? OR GRAPHIC?)
S4	136	S3 (10N) (ONLINE? OR ON()LINE? OR REMOTE? OR WWW OR CLIENT- ( )SERVER? OR NETWORK? OR LAN OR INTRANET? OR TELNET? OR WORLD- WIDE()WEB OR WEB)
S5	65	S3 (10N) (SHARED()SPACE OR VR OR VIRTUAL)
S6	183	S4 OR S5
S7	158	S6 NOT AD=19951113:19971113
S8	66	S7 NOT AD=19971113:20001113
S9	9	S8 NOT AD=20001113:20021113
S10	9	S9 NOT AD=20021113:20040601

File 348:EUROPEAN PATENTS 1978-2004/May W03  
(c) 2004 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20040520,UT=20040513  
(c) 2004 WIPO/Univentio

Set	Items	Description
S1	1313036	COMPUTER? OR VIDEO? OR VR OR VIRTUAL()REALIT? OR WEB OR WWW OR WORLDWIDWEB OR ONLINE? OR ON()LINE? OR CLIENT()SERVER? OR INTERNET?
S2	13936	(GRAPHIC? OR IMAGE? OR ICON OR ICONS OR PICTURE? OR 3D) (N)-(CHARACTER? OR INDIVIDUAL? OR PLAYER? OR PROTAGANIST?) OR AV-ATAR? OR SPRITE? OR GENIE?
S3	150072	MULTIUSER OR GAME? OR ROLE()PLAYING OR MUD OR MOO OR (MULTI OR MULTIPLE OR PLURAL)()USER()ROLE? OR (MULTI OR MULTIPLE OR PLURAL)()USER() (DUNGEON? OR DIMENSION?) OR VIDEOGAME?
S4	240	S1 AND S2 AND S3
S5	174	S4 NOT AD=19951113:19981113
S6	72	S5 NOT AD=19981113:20011113
S7	49	S6 NOT AD=20011113:20040522
S8	20	S7 AND IC=(G06F? OR H04L?)
S9	17	S7 AND IC=G09G?
S10	29	S8 OR S9
S11	29	IDPAT (sorted in duplicate/non-duplicate order)
S12	27	IDPAT (primary/non-duplicate records only)
S13	0	S12 AND (ONLINE OR ON()LINE OR CLIENT()SERVER? OR SHARED()-SPACE? OR VR OR VIRTUAL()REALIT? OR INTERNET? OR WWW OR WORLD-WIDE()WEB)
S14	0	S12 AND (MOO OR MUD)

File 347:JAPIO Nov 1976-2004/Jan(Updated 040506)  
(c) 2004 JPO & JAPIO

File 350:Derwent WPIX 1963-2004/UD,UM &UP=200432  
(c) 2004 Thomson Derwent



12/5/9 (Item 9 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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010452448

WPI Acc No: 1995-353767/199546

Related WPI Acc No: 2003-549142

**Competition video game device - has display unit which displays image according to sprite data and background data**

Patent Assignee: SEGA ENTERPRISES KK (SEGA-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 7231985	A	19950905	JP 9451270	A	19940223	199546 B

Priority Applications (No Type Date): JP 9451270 A 19940223

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 7231985	A	6	A63F-009/22	

Abstract (Basic): JP 7231985 A

A ROM (4) stores **sprite** data of a vehicle and the background data. The **sprite** data and the background are read from the ROM by a VRAM (5). A CPU (1) controls the reading of **sprite** data from the VRAM. The size of the **sprite** data is changed by a first **video** display processor (6). The CPU controls the reading of background data from VRAM. The size of the background data is changed by a second **video** display processor (7). A display unit (8) displays the image according to the **sprite** data and the background data obtained from the first and second **video** display processors respectively.

ADVANTAGE - Realises acceleration and slowing down operation.  
Enables change in size of image arbitrarily.

Dwg.1/7

Title Terms: COMPETE; **VIDEO** ; **GAME** ; DEVICE; DISPLAY; UNIT; DISPLAY; IMAGE; ACCORD; **SPRITE** ; DATA; BACKGROUND; DATA

Derwent Class: P36; P85; T01; W04

International Patent Class (Main): A63F-009/22

International Patent Class (Additional): G06T-001/00; G06T-003/40;

**G09G-005/36** ; **G09G-005/38** ; G11B-007/00

File Segment: EPI; EngPI

12/5/8 (Item 8 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

010508009 \*\*Image available\*\*  
WPI Acc No: 1996-004960/199601  
XRPX Acc No: N96-004648

**Image data reproduction appts for e.g computer game - calculates representation value for each block which is considered for computer game or icon character and reads value stored in memory**

Patent Assignee: HITACHI LTD (HITA )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 7282243	A	19951027	JP 9477394	A	19940415	199601 B

Priority Applications (No Type Date): JP 9477394 A 19940415

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 7282243	A		10	G06T-003/40	

Abstract (Basic): JP 7282243 A

The appts digitizes the output signal of an image pick up device which is input by an input terminal (14). The digitized data is processed by a colour detachment circuit (9), a colour space matrix (10), and a brightness and colour difference signal processing circuit (11), to produce a standard colour **video** signal. An output terminal (15) feeds the colour **video** signal to the monitor. A block division circuit (12) divides the first **video** signal into blocks.

A representation value calculation circuit (13) computes the representation value such as mean value of sample data for each block. The represented value of each computed block is taken as **character image** data for **computer games** and icon. A temporary memory stores the representation value. A microcomputer reads the representation value from memory.

ADVANTAGE - Forms **image character** for **computer game** or icon, easily. Reduces character generation time.

Dwg.2/12

Title Terms: IMAGE; DATA; REPRODUCE; APPARATUS; **COMPUTER** ; **GAME** ;  
CALCULATE; REPRESENT; VALUE; BLOCK; **COMPUTER** ; **GAME** ; CHARACTER; READ;  
VALUE; STORAGE; MEMORY

Derwent Class: T01; W04

International Patent Class (Main): G06T-003/40

International Patent Class (Additional): **G06F-003/14** ; G06T-001/00;

H04N-007/18

File Segment: EPI

12/5/9 (Item 9 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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010452448

WPI Acc No: 1995-353767/199546

Related WPI Acc No: 2003-549142

**Competition video game device - has display unit which displays image according to sprite data and background data**

Patent Assignee: SEGA ENTERPRISES KK (SEGA-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 7231985	A	19950905	JP 9451270	A	19940223	199546 B

Priority Applications (No Type Date): JP 9451270 A 19940223

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 7231985	A	6	A63F-009/22	

Abstract (Basic): JP 7231985 A

A ROM (4) stores **sprite** data of a vehicle and the background data. The **sprite** data and the background are read from the ROM by a VRAM (5). A CPU (1) controls the reading of **sprite** data from the VRAM. The size of the **sprite** data is changed by a first **video** display processor (6). The CPU controls the reading of background data from VRAM. The size of the background data is changed by a second **video** display processor (7). A display unit (8) displays the image according to the **sprite** data and the background data obtained from the first and second **video** display processors respectively.

ADVANTAGE - Realises acceleration and slowing down operation.  
Enables change in size of image arbitrarily.

Dwg.1/7

Title Terms: COMPETE; **VIDEO** ; **GAME** ; DEVICE; DISPLAY; UNIT; DISPLAY; IMAGE; ACCORD; **SPRITE** ; DATA; BACKGROUND; DATA

Derwent Class: P36; P85; T01; W04

International Patent Class (Main): A63F-009/22

International Patent Class (Additional): G06T-001/00; G06T-003/40;

**G09G-005/36** ; **G09G-005/38** ; G11B-007/00

File Segment: EPI; EngPI

12/5/10 (Item 10 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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010405917 \*\*Image available\*\*  
WPI Acc No: 1995-307236/199540  
XRPX Acc No: N95-233249

Image processing for several display screens on computer game appts.  
- generates required information to screen output information table that  
stores information and screen output processing which are performed by  
turns in order to form background and sprite screen

Patent Assignee: HUDSON KK (HUDS-N)  
Number of Countries: 001 Number of Patents: 002  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 7204347	A	19950808	JP 9422032	A	19940121	199540 B
JP 3380614	B2	20030224	JP 9422032	A	19940121	200317

Priority Applications (No Type Date): JP 9422032 A 19940121

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 7204347	A		7	A63F-009/22	
JP 3380614	B2		7	G09G-005/38	Previous Publ. patent JP 7204347

Abstract (Basic): JP 7204347 A

The method involves producing required information for a screen display to a screen output information table through a first processor. This table stores the information needed for internal processing. A repetitive internal processing and screen output processing is performed by turns and forms two kinds of screens, the background and the **sprite**.

When the predetermined maximum iteration of the screen output is exceeded, it performs and finishes a screen output unconditionally through a second processor based on the information produced by the first processor.

ADVANTAGE - Prevents fall of processing speed even when amt. of display data increases.

Dwg.11/15

Title Terms: IMAGE; PROCESS; DISPLAY; SCREEN; **COMPUTER** ; **GAME** ; APPARATUS ; GENERATE; REQUIRE; INFORMATION; SCREEN; OUTPUT; INFORMATION; TABLE; STORAGE; INFORMATION; SCREEN; OUTPUT; PROCESS; PERFORMANCE; TURN; ORDER; FORM; BACKGROUND; **SPRITE** ; SCREEN

Derwent Class: P36; P85; T01; W04

International Patent Class (Main): A63F-009/22; **G09G-005/38**

International Patent Class (Additional): A63F-013/00; G06T-001/00;

**G09G-005/00** ; H04N-005/272

File Segment: EPI; EngPI

12/5/14 (Item 14 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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008503311 \*\*Image available\*\*  
WPI Acc No: 1991-007395/199101  
XRPX Acc No: N91-005796

Sprite control block structure for graphics display - has byte defining  
sprite characteristics, second defining which remaining bytes are used  
and third specifying collision information

Patent Assignee: ATARI CORP (ATAR-N)  
Inventor: MICAL R J; NEEDLE D L  
Number of Countries: 030 Number of Patents: 003  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9015396	A	19901213				199101 B
AU 9058445	A	19910107				199115
WO 9015396	A3	19920305	WO 90US2997	A	19900601	199510

Priority Applications (No Type Date): US 89360336 A 19890602  
Cited Patents: NoSR.Pub; US 4552360; US 4710877; US 4748577; US 4864289

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 9015396	A			

Designated States (National): AU BB BR CA FI HU JP KP KR LK MC MG MW NO  
RO SD SU

Designated States (Regional): AT BE CH DE DK ES FR GB IT LU NL OA SE

Abstract (Basic): WO 9015396 A

A display image is processed from **sprite** information by a processing unit, with data and instruction transferred to and from ram, under control of a program. Included in the program are instructions defining a flexible **sprite** control block structure (50).

The first three bytes (52) of the **sprite** control block (50) are control words. The first byte (52) (SPRCTLO) defines the **sprite** characteristics. The second byte (56) (SPRCTLI) defines which remaining bytes are used, ignored or re-used, bits B5 and B4 specify optional byte (62) usage and bit B3 specifies use of new of previous palette (62). The third byte (58) specifies collision information.

USE/ADVANTAGE - **Video games**. **Video** image generated from **sprite** control block structure which only uses memory as required.  
(18pp Dwg.No.3/17)

Title Terms: **SPRITE** ; CONTROL; BLOCK; STRUCTURE; GRAPHIC; DISPLAY; BYTE;  
DEFINE; **SPRITE** ; CHARACTERISTIC; SECOND; DEFINE; REMAINING; BYTE; THIRD;  
SPECIFIED; COLLIDE; INFORMATION

Derwent Class: T01

International Patent Class (Additional): **G06F-015/62**

File Segment: EPI

12/5/19 (Item 19 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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007358567

WPI Acc No: 1987-355573/198750

XRFX Acc No: N87-266399

Video game using digitised images of being into game graphics -  
uses stored image of persons as head of video graphics generated body  
as functional game object or as controllable playing object

Patent Assignee: MARVIN GLASS & ASSOC (GLSM )

Inventor: BRESLOW J D; HANSON S P; MORRISON H J; RASMUSSEN R G

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4710873	A	19871201	US 84587990	A	19840309	198750 B

Priority Applications (No Type Date): US 84587990 A 19840309; US 82395353 A  
19820706

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 4710873	A	12		

Abstract (Basic): US 4710873 A

The **video game** system comprises a user input apparatus for providing signal outputs responsive to user provided stimulus. A controller provides a **video game** audiovisual presentation. The presentation comprises a sequence of display images, each comprising the combination of a number of predetermined imagery segments including a preselected **character imagery** segment. The sequence order of presentation is determined responsive to a non-user defined predefined set of **game** rules and responsive to the user input apparatus.

A user **video** image is created in response to the user input apparatus which stores the user **video** image in a memory. The user **video** image is associated with the preselected **character imagery** segment such that the user **video** image is incorporated into the audiovisual presentation of the **video game**.

ADVANTAGE - Enhances realism.

1/12

Title Terms: **VIDEO** ; **GAME** ; DIGITAL; IMAGE; **GAME** ; GRAPHIC; STORAGE;  
IMAGE; PERSON; HEAD; **VIDEO** ; GRAPHIC; GENERATE; BODY; FUNCTION; **GAME** ;  
OBJECT; CONTROL; PLAY; OBJECT

Derwent Class: P36; T01; W04

International Patent Class (Additional): A63F-009/22; G06F-015/44

File Segment: EPI; EngPI

Set	Items	Description
S1	13722	(MULTIPL? OR PLURAL? OR MANY OR SEVERAL OR GROUP) (2N) (PLAY- ER? OR PARTICIPANT? OR USER? OR GAMER?)
S2	1866	S1 AND (GAME? OR VIDEOGAME? OR MOO OR MUD OR MUX OR MUSH OR MUCK OR DOMAIN? OR DUNGEON?)
S3	37	S2 AND (AVATAR? OR SPRITE? OR ICON? OR GRAPHIC?)
S4	18	S3 AND (ONLINE? OR ON()LINE? OR REMOTE? OR WWW OR CLIENT()- SERVER? OR NETWORK? OR LAN OR INTRANET? OR TELNET? OR WORLDWI- DE()WEB OR WEB)
S5	7	S3 AND (SHARED()SPACE OR VR OR VIRTUAL)
S6	22	S4 OR S5
S7	18	S6 NOT AD=19951113:19971113
S8	11	S7 NOT AD=19971113:20001113
S9	3	S8 NOT AD=20001113:20021113
S10	3	S9 NOT AD=20021113:20040601

File 347:JAPIO Nov 1976-2004/Jan(Updated 040506)  
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File 350:Derwent WPIX 1963-2004/UD,UM &UP=200432  
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10/5/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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011525662 \*\*Image available\*\*  
WPI Acc No: 1997-502148/199746  
XRPX Acc No: N97-418629

**Entertainment system for several players - has several cockpits which are driven by local processors and which each have high resolution colour displays and also has hub processor for maintaining database of players and description of game universe**

Patent Assignee: HABILAS INC (HABI-N)  
Inventor: DECKLER W E; FERGESON S L; HORSTMANN K B  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5674127	A	19971007	US 95400035	A	19950307	199746 B

Priority Applications (No Type Date): US 95400035 A 19950307

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5674127	A	16	A63F-009/22	

Abstract (Basic): US 5674127 A

The entertainment system includes several cockpits each having several computer **graphical** display devices. At least one of the display devices includes a colour display of not less than 1024 by 768 pixels resolution. Each of the cockpits is disposed upon a full motion base. Several local processors are each used for driving the computer **graphical** display devices of several cockpit shells.

A hub processor is responsible for maintaining a database of players and player **virtual** personae and also for maintaining a description of a **game** universe. The hub processor also communicates audio signals between local processors and communicates locations of craft between local processors. Preferably the audio signals are communicated in digital form.

USE/ADVANTAGE - E.g. for multiplayer, fully immersive, real-time, multisensory, interactive, role playing electronic **games**. Allows **several players** who are physically located at more than one disparate location, to interact within same **game** universe.

Dwg.1,2/11

Title Terms: ENTERTAINMENT; SYSTEM; PLAY; DRIVE; LOCAL; PROCESSOR; HIGH; RESOLUTION; COLOUR; DISPLAY; HUB; PROCESSOR; MAINTAIN; DATABASE; PLAY; DESCRIBE; **GAME**; UNIVERSE

Derwent Class: P36; W02; W04

International Patent Class (Main): A63F-009/22

File Segment: EPI; EngPI

10/5/3 (Item 3 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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011025967 \*\*Image available\*\*  
WPI Acc No: 1997-003891/199701  
XRPX Acc No: N97-003470

**Virtual environment recording device for computer graphics - has terminal support controller that regulates operation of terminals where information switching is performed by transmitter**

Patent Assignee: MATSUSHITA DENKI SANGYO KK (MATU )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8272997	A	19961018	JP 9569825	A	19950328	199701 B

Priority Applications (No Type Date): JP 9569825 A 19950328

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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Abstract (Basic): JP 8272997 A

The device has an input data determiner (12) to determine the data as an input information to be used, from the input information of an input unit (11). The information output by an output unit (13) is transmitted by a transmitter (14). The transmitter, the input data determiner, the input unit and the output unit are controlled by a terminal controller (15).

The information switching is performed by the transmitter between several terminals. The operation of the terminals are controlled by a terminal support controller (102) where the terminal controller is provided.

ADVANTAGE - Performs recording when **several users** are participating in playing **virtual game** .

Dwg.1/13

Title Terms: **VIRTUAL** ; ENVIRONMENT; RECORD; DEVICE; COMPUTER; **GRAPHIC** ;  
TERMINAL; SUPPORT; CONTROL; REGULATE; OPERATE; TERMINAL; INFORMATION;  
SWITCH; PERFORMANCE; TRANSMIT

Derwent Class: T01

International Patent Class (Main): G06T-013/00

International Patent Class (Additional): G06F-013/00

File Segment: EPI

Set	Items	Description
S1	1313036	COMPUTER? OR VIDEO? OR VR OR VIRTUAL()REALIT? OR WEB OR WWW OR WORLDWIDEBWEB OR ONLINE? OR ON()LINE? OR CLIENT()SERVER? OR INTERNET?
S2	13936	(GRAPHIC? OR IMAGE? OR ICON OR ICONS OR PICTURE? OR 3D) (N)-(CHARACTER? OR INDIVIDUAL? OR PLAYER? OR PROTAGANIST?) OR AVATAR? OR SPRITE? OR GENIE?
S3	150072	MULTIUSER OR GAME? OR ROLE()PLAYING OR MUD OR MOO OR (MULTI OR MULTIPLE OR PLURAL)()USER()ROLE? OR (MULTI OR MULTIPLE OR PLURAL)()USER() (DUNGEON? OR DIMENSION?) OR VIDEOGAME?
S4	240	S1 AND S2 AND S3
S5	174	S4 NOT AD=19951113:19981113
S6	72	S5 NOT AD=19981113:20011113
S7	49	S6 NOT AD=20011113:20040522
S8	20	S7 AND IC=(G06F? OR H04L?)
S9	17	S7 AND IC=G09G?
S10	29	S8 OR S9
S11	29	IDPAT (sorted in duplicate/non-duplicate order)
S12	27	IDPAT (primary/non-duplicate records only)
S13	0	S12 AND (ONLINE OR ON()LINE OR CLIENT()SERVER? OR SHARED()-SPACE? OR VR OR VIRTUAL()REALIT? OR INTERNET? OR WWW OR WORLD-WIDE()WEB)
S14	0	S12 AND (MOO OR MUD)
S15	345	AVATAR?
S16	960	MOO OR MOOS
S17	1305	S15 OR S16
S18	105	S17 AND (GAME? OR VIDEOGAME? OR VR OR VIRTUAL()REALIT? OR -SHARED? OR MULTIUSER? OR MULIT()USER? OR MULTIPLE()USER?)
S19	75	S18 NOT AD=19951113:19981113
S20	38	S19 NOT AD=19981113:20001113
S21	2	S20 NOT AD=20001113:20031113
S22	2	S21 NOT AD=20031113:20040901
File 347:JAPIO Nov 1976-2004/Jan(Updated 040506)		
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File 350:Derwent WPIX 1963-2004/UD,UM &UP=200432		
(c) 2004 Thomson Derwent		

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University of South Florida  
Tampa, FL  
November, 1994

# **Bibliography of Electronically Available Sources: MOOs, MUDs, MUCKs, and MUSHs**

**An MLA-style adaptation of the bibliography available at telnet  
purple.crayon.media.mit.edu 8888**

Bartle, Dr. Richard. "Interactive Multi-User Computer Games."  
<ftp://parcftp.xerox.com/pub/MOO/papers/mudreport.txt>  
(16 Nov. 1994).

Written by Dr. Richard Bartle, one of the authors of the very first MUD, this is a reformatted version of a report commissioned by British Telecom plc. The main component of the report is a comprehensive overview of what then constituted the major products in this category.

Brace, Brad (figid). "Art in the Age of Digital Dissemination."  
<ftp://ftp.netcom.com/pub/bbrace>, or  
<ftp://actlab.rtf.utexas.edu/pub/ArtandTechnology> (16 Nov. 1994).

Fine Art course description and class essays involving digital technology.

Bruckman, Amy. "Approaches to Managing Deviant Behavior in Virtual Communities."

<ftp://ftp.media.mit.edu/pub/asb/papers/deviance-chi94.txt> (16 Nov. 1994).

It is an unfortunate fact of life that where there are multi-user computer systems, there will be antisocial behavior. On bulletin board systems (BBSs), there are those who persist in being obscene, harassing, and libelous. In virtual worlds such as MUDs, there are problems of theft, vandalism, and virtual rape. Behavior is 'deviant' if it is not in accordance with community standards. How are such standards developed? Should standards be established by system administrators and accepted as a condition of participation, or should they be developed by community members? Once a particular person's behavior is deemed unacceptable, what steps should be taken? Should such steps be taken by individuals, such as 'filters' or 'kill' files on BBSs, and 'gagging' or 'ignoring' on MUDs? Or should the administrators take action, banning an individual from the system or censoring their postings? What is the appropriate balance between centralized and decentralized solutions? Gags and filters are computational solutions to deviant behavior. Are there appropriate social solutions? How effective are

approaches like feedback from peers, community forums, and heart-to-heart chats with sympathetic system administrators? Are different approaches effective with communities of different sizes? What is the appropriate balance between social and technological solutions?

- . "Democracy in Cyberspace." Paper presented at DIAC 94, Cambridge, MA, 23-24 Apr. 1994. <ftp://ftp.media.mit.edu/pub/asb/papers/democracy-diac94.txt> (16 Nov. 1994).

How is cyberspace to be governed? Bulletin boards systems, text-based virtual reality systems (or "MUDs"), and other services on computer networks are not merely sources of information; they are communities. Those communities are playing an increasing part in the daily lives of a broader and broader segment of the population. Are they to be controlled by the owners of the hardware and software, or by the participants? Pavel Curtis, the founder of LambdaMOO, will briefly describe the history of direct democracy on LambdaMOO. Amy Bruckman, the founder of MediaMOO, will briefly describe the history of representative democracy on MediaMOO. Nancy Deuel, one of MediaMOO's first elected councilors, will discuss her experiences as an elected official. Members of the LambdaMOO and MediaMOO communities will be invited to talk about how these experiments have affected them.

- . "Gender Swapping on the Internet." <ftp://ftp.media.mit.edu/pub/asb/papers/gender-swapping.txt> (16 Nov. 1994).

In text-based virtual reality environments on the Internet called MUDs, it is possible to pretend to be the opposite gender. In these virtual worlds, the way gender structures basic human interaction is often noticed and reflected upon. This paper introduces MUDs, and then presents a community discussion about gender issues that MUDs inspired. Gender swapping is one example of ways in which network technology can impact not just work practice but also culture and values.

- . "Identity Workshop: Emergent Social and Psychological Phenomena in Text-Based Virtual Reality." <ftp://ftp.media.mit.edu/pub/asb/papers/identity-workshop.ps> (16 Nov. 1994).

This survey paper introduces the different kinds of MUDs, and social phenomena typical of each kind. It introduces issues of representations of self and how MUDs form a kind of 'identity workshop.' Introduces the notion of MUDs as an evocative medium--by being between reality and unreality, MUDs often encourage people to reflect on the nature of reality. Introduces gender issues that arise in MUDs, and explores the topic of MUD addiction. April 1992.

- . "Programming for Fun: MUDs as a Context for Collaborative Learning." <ftp://ftp.media.mit.edu/pub/asb/papers/necc94.txt> (16 Nov. 1994).

In text-based virtual reality environments on the Internet called "MUDs," participants meet people from all over the world. They can not only explore the virtual world, but extend it, creating new objects and places. MUDs are Constructionist environments in which people build personally meaningful artifacts. But unlike many Constructionist environments, MUDs place special emphasis on collaboration, encouraging construction within a social setting. This paper presents a case study of the experiences of a 43-year-old building contractor named Jim. It is one of an ongoing series of interviews I have conducted with people who learned to program for the first time in a MUD called MediaMOO. Salient features of their learning experiences include ease of collaboration, availability of technical assistance from peers, playfulness, availability of an audience for completed work, and community spirit. The success of MUDs as a learning environment for adults points to its potential as a learning environment for children.

- . "'Serious' Uses of MUDs?" Panel presented at DIAC 94, Cambridge, MA, 23-24 Apr. 1994. <ftp://ftp.media.mit.edu/pub/asb/papers/serious-diac94.txt> (16 Nov. 1994).

Are MUDs useful for 'serious' purposes? Or are they 'just games'? Are people exploring the 'serious' uses of MUDs pioneering the future of cyberspace? Does cyberspace challenge us to redefine the boundaries between work and play, fantasy and reality? The panelists--who represent five 'serious' MUD research projects: MediaMOO, Jupiter, Worldbenders, Infopark, and AstroVR--will address these issues.

- . "Whole Learning: Three Communities Meet in Cyberspace." Address to the Tenth Computers and Writing Conference, Columbia, MO: May, 1994. <ftp://ftp.media.mit.edu/pub/asb/papers/cwc94.txt> (16 Nov. 1994).

Extended abstract of plenary address to be given at The Tenth Computers and Writing Conference in Columbia, Missouri, May 1994. This talk highlights connections between research in computers and writing, constructionism, and whole language.

- Bruckman, Amy, and Mitchel Resnick. "Virtual Professional Community, Results from the MediaMOO Project." <ftp://ftp.media.mit.edu/pub/asb/papers/mediaMOO-3cyberconf.README> (16 Nov. 1994).

MediaMOO is a text-based, networked, virtual reality environment designed to enhance professional community among media researchers. This paper analyzes experience with the system to date and highlights the value of Constructionist principles to virtual reality design. Written together with Mitchel Resnick. Presented at the Third International Conference on Cyberspace in Austin, Texas, May 1993.

- Carlstrom, Eva-Lise. "Better Living Through Language: The Communicative Implications of a Text-Only Virtual Environment, or, Welcome to LambdaMOO!" <ftp://parcftp.xerox.com/pub/MOO/papers/communicative.txt>

(16 Nov. 1994).

This is a paper by Eva-Lise Carlstrom, a student at Grinnell College, also known as 'PatGently' on LambdaMOO.

Curtis, Pavel. "Mudding: Social Phenomena in Text-Based Virtual Realities." <ftp://parcftp.xerox.com/pub/MOO/papers/DIAC92.txt> (16 Nov. 1994).

This paper was written by Pavel Curtis (aka Haakon, creator of LambdaMOO) for submission to the 1992 conference on Directions and Implications of Advanced Computing, sponsored by Computer Professionals for Social Responsibility. A version of this paper was also published in the small-press magazine 'Intertek'.

Curtis, Pavel, and David Nichols. "MUDs Grow Up." Paper presented at Third International Conference on Cyberspace, May 1993. <ftp://parcftp.xerox.com/pub/MOO/papers/MUDsGrowUp.txt> (16 Nov. 1994).

This paper was written by Pavel Curtis and David Nichols, both of Xerox PARC, for presentation at the Third International Conference on Cyberspace, held in May, 1993.

Dibbell, Julian. "A Rape in Cyberspace, or, How an Evil Clown, a Haitian Trickster Spirit, Two Wizards, and a Cast of Dozens Turned a Database Into a Society." The Village Voice 21 Dec. 1993: 36-42. <ftp://parcftp.xerox.com/pub/MOO/papers/VillageVoice.txt> (16 Nov. 1994).

This is an article written by Julian Dibbell that Originally appeared in the December 21, 1993 issue of the Village Voice newspaper, in New York City. It concerns the infamous 'Mr. Bungle Affair' that was one of the primary catalysts for the development of organized democratic institutions on LambdaMOO.

Haynes-Burton, Cynthia. "Inside the Teaching Machine: Actual Feminism and (Virtual) Pedagogy." Available at [ftp://ftp.utarlq.uta.edu/pub/\[anonymous.writing\\_center\]](ftp://ftp.utarlq.uta.edu/pub/[anonymous.writing_center]) (to be uploaded soon) (16 Nov. 1994).

This article is a critique of feminist pedagogy using subcultural analyses and virtual systems theory. Its aim is to provide an alternative model to feminist pedagogy that subverts existing classroom hierarchies and dominant ideologies. By using virtual reality, and its reconceptualization of spatiality and identity politics, the author calls for negotiation rather than manipulation as the predominant mode of the teacher in the pedagogical contract.

Holmevik, Jan Rune. "Compiling SIMULA: A Historical Study of Technological Genesis." <ftp://ftp.utrinstr.utri.no/pub/papers/Simula.txt> (16 Nov. 1994).

This article traces the history of the programming language SIMULA from the 1950s into the 1970s, focusing in particular on the

formative years between 1962 and 1967. SIMULA first introduced the concepts of object oriented programming, and is today considered the original OOP language.

Masinter, Larry, and Erik Ostrom. "Collaborative Information Retrieval: Gopher from MOO." <ftp://parcftp.xerox.com/pub/MOO/papers/MOOGopher.txt> (16 Nov. 1994).

A paper by Larry Masinter, a researcher at the Xerox Palo Alto Research Center also known as 'Grump,' 'Froxx' or 'Larry' on LambdaMOO and other MUDs, and Erik Ostrom, a student at Gustavus Adolphus College also known as 'JoeFeedback,' 'Guest,' or 'Erik' on Lambda.MOO and other MUDs.

Evard, Remy. "Collaborative Networked Communication: MUDs as Systems Tools." <ftp://parcftp.xerox.com/pub/MOO/papers/Evard.ps> (16 Nov. 1994).

This is a paper by Remy Evard, the head of the system administration group at Northeastern University, presented at the 1993 LISA conference.

Foner, Leonard N. "What's An Agent, Anyway? A Sociological Case Study." <ftp://ftp.media.mit.edu/pub/MediaMOO/Papers/Agents--Julia.ps> (16 Nov. 1994).

The term 'agent' has been picked up, widely appropriated, and in many cases misappropriated, by technical publications, lay publications, and many researchers in computer science. I examine some of the appropriations and misappropriations, talk about their reasons and implications, and delve into a case study of an agent that is used to illustratively define what @i(I) [sic] consider an agent to be, and why many of the current uses of the term are misleading. The agent I consider is @i(Julia), a TinyMUD robot of the Maas-Neotek family, all of whom have been in almost constant use at several site on the Internet for the last two or three years. I also speak at length about the sociology of such agents, what we might expect to find in the future, and why sociology is such an important aspect to consider when investigating agent-oriented programming.

Mauldin, Michael L. "CHATTERBOTS, TINYMUDs, and the Turing Test." <ftp.nl.cs.cmu.edu/usr/mlm/ftp/pubs/aaai94.ps.Z> (16 Nov. 1994).

The Turing test was proposed by Alan Turing in 1950; he called it the Imitation Game. In 1991 Hugh Loebner started the Loebner Prize competition, offering a \$100,000 prize to the author of the first computer program to pass an unrestricted Turing test. Annual competitions are held each year with smaller prizes for the best program on a restricted Turing test. This paper describes the development of one such Turing System, including the technical design of the program and its performance on the first three Loebner Prize competitions. We also discuss the program's four year development effort, which has depended heavily on constant interaction with people on the Internet via Tinymuds (multiuser

network communication servers that are a cross between role-playing games and computer forums like CompuServe). Finally, we discuss the design of the Loebner competition itself, and address its usefulness in furthering the development of Artificial Intelligence.

Reid, Elizabeth M. "Electropolis: Communication and Community On Internet Relay Chat."

<ftp://parcftp.xerox.com/pub/MOO/papers/electropolis.txt>  
(16 Nov. 1994).

This is the honors thesis of Elizabeth M. Reid, a history student at the University of Melbourne also known as 'Ireshi' on IRC.

Rosenberg, Michael S. "Virtual Reality: Reflections of Life, Dreams, and Technology--An Ethnography of a Computer Society."

<ftp://parcftp.xerox.com/pub/MOO/papers/ethnography.txt>  
(16 Nov. 1994).

This is a paper by Michael S. Rosenberg, a student at Northwestern University, for a class in ethnography. The culture studied is that of LambdaMOO, though all of the names have been changed to protect the identities of the participants.

Rousch, Wade. "The Virtual STS Centre on MediaMOO: Issues and Challenges as Non-Technical Users Enter Social Virtual Spaces."

<ftp://ftp.media.mit.edu/pub/MediaMOO/Papers/STS-centre> (16 Nov. 1994).

In 1988, Apple Computer, Inc., released a concept video entitled "Knowledge Navigator" which has since been viewed widely among professionals in the electronic media and computer fields. The video combined convincing mock-up equipment and high production quality to demonstrate ideas about "agents," customizable personal automata which would, like perfectly servile butlers or executive secretaries, smooth the computer user's way through the information nexus. The particular near-future scenario chosen by the video's producers involves a middle-aged, probably Northern Californian academic of indeterminate discipline, who relies on his Apple agent to organize his daily schedule, manage the process of scholarly research, establish video and data connections with fellow academics, and screen out annoying phone calls from his mother. Because this video is so widely known, it serves as a useful substrate for describing a somewhat different concept of the computerization of scholarly communication. Latent in the Knowledge Navigator presentation are possibilities for the organization of real-time cooperative work in what can best be described as "virtual spaces," electronic environments where users at two or more distant locations can gather, communicate, and manipulate information.

Serpentelli, Jill. "Conversational Structure and Personality Correlates of Electronic Communication."

<ftp://parcftp.xerox.com/pub/MOO/papers/conv-structure.txt>  
(16 Nov. 1994).

This is the bachelors thesis of Jill Serpentelli, a psychology student at Haverford College, also known as 'TamLin' on various MUDs.



Takacs, Mark. "Prolix - A Text-based Participant System for VR."  
<ftp://parcftp.xerox.com/pub/MOO/contrib/papers/Prolix.tar.Z>  
(16 Nov. 1994).

Virtual Reality has captured the imagination of many people, yet few have experienced it directly due to the currently expensive display and sensor technologies. Those who have experienced virtual worlds often comment on the world's inability to maintain interest with prolonged use. The only thing that remains consistently interesting are other human users. yet the number of users in a multi-participant world is realistically limited by the great cost of equipping each user with motion tracking sensors, head mounted audio and visual displays, input devices or other interface gear. This thesis presents a program called Prolix which allows access to the virtual worlds running at the Human Interface Technology Lab (HITLab) without the expensive interface equipment. Prolix assumes only a keyboard and a screen with vt100 capability. Input to the virtual world is accomplished via typed commands and cursor keys, while output appears as narrative text and a simple ASCII- character plan-view of the participant's immediate surroundings. The text interaction style uses the conventions and interface feel of internet Multi User Domains (MUDs). An informal pilot study shows that Prolix provides a usable, effective and enjoyable way to communicate with others using the same access interface. Prolix successfully placed a text based person in two VR worlds, one with another immersive user, the other with another Prolix user. However, in the immersive setting, the Prolix user's graphical display was soon overwhelmed by the volume of information generated by the moving entities and needed to be frequently refreshed.

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## **Additions to Bibliography of Electronically-Available Sources: MOOs, MUDs, MUCKs, and MUSHs**

**December 1994**

Burka, Lauren P. "A Hypertext History of Multi-User Dimensions."  
<http://www.ccs.neu.edu/home/lpb/> (20 Nov. 1994).

I am maintaining a Mud Archive for people who are interesting in the history and future of multi-user internet games. I have collected here documents pertaining to the history of MUDs. Most of these documents are posts saved from usenet, MUD-related mailing lists, or actual logs of MUD interactions. Many of them are of historical or humorous interest. MUD software is still

evolving. Computer interaction, where identities are fluid and the division between word and deed is nonexistent, presents new and unique problems that will never be solved.

Cherny, Lynn. "Gender Differences in Text-Based Virtual Reality."  
<ftp://parcftp.xerox.com/pub/MOO/papers/Gender.txt> (20 Nov. 1994).

Paper to appear in Proceedings of the Berkeley Conference on Women and Language, April 94.

Gomes, Lee. "Xerox's On-Line Neighborhood: A Great Place to Visit."  
Mercury News 3 May 1992. [telnet lambda.parc.xerox.com 8888](telnet:lambda.parc.xerox.com:8888), @go #50827, press 13 (20 Nov. 1994).

Although you'd never know by gazing up at it from the Foothill Expressway, inside the Xerox Palo Alto Research Center (PARC) is an enormous mansion with hundreds of rooms, a place where scores of people from dozens of countries drop by each day for conversation, television-watching and an occasional food fight.

Quittner, Joshua. "Far Out: Welcome to Their World Built of MUD."  
Published in Newsday, 7 Nov., 1993. [gopher /MOOs/University of Koeln/About MUDs, MOOs and MUSEs in Education/Selected Papers/newsday](mailto:gopher/MOOs/University%20of%20Koeln/About%20MUDs,%20MOOs%20and%20MUSEs%20in%20Education/Selected%20Papers/newsday) (20 Nov. 1994).

In their brave new world of 'Virtual Reality,' inhabitants talk by typing, walk in unlimited space - and can wind up addicted.

Reid, Elizabeth. "Cultural Formations in Text-Based Virtual Realities."  
[ftp://parcftp.xerox.com/pub/MOO/papers/Cultural\\_Formations.txt](ftp://parcftp.xerox.com/pub/MOO/papers/Cultural_Formations.txt) (20 Nov. 1994).

Beginning with an understanding of virtual reality as an imaginative experience and thus a cultural construct rather than a technical construction, this thesis discusses cultural and social issues raised by interaction on 'MUDs', which are text-based virtual reality systems run on the international computer network known as the Internet. MUD usage forces users to deconstruct many of the cultural tools and understandings that form the basis of more conventional systems of interaction. Unable to rely on physical cues as a channel of meaning, users of MUDs have developed ways of substituting for or by-passing them, resulting in novel methods of textualising the non-verbal. The nature of the body and sexuality are problematised in these virtual environments, since the physical is never fixed and gender is a self-selected attribute. In coming to terms with these aspects of virtual interaction, new systems of significance have been developed by users, along with methods of enforcing that cultural hegemony through power structures dependent upon manipulation of the virtual environment. These new systems of meaning and social control define those who use MUDs as constituting a distinct cultural group.

Roush, Wade. "Have Computer, Won't Travel: Virtual Meeting Place Opens at MIT Media Lab." Technology Review Magazine Feb. 1993.

<ftp://ftp.media.mit.edu/pub/MediaMOO/Papers/Roush--Have-Computer-Won't-Travel> (20 Nov. 1994).

Scientific meetings--of which there are now over 10,000 every year in the United States alone--have long been a dreary necessity for researchers committed to keeping up in their fields of study. But just as radio and television spelled extinction for the old lecture-circuit tradition in this country, a new application of computer networking may be sending the scientific convention to an early grave. The latest addition to the eclectic mix of electronic communications technologies being explored at the MIT Media Lab, a computerized fantasy-game environment fancifully named MediaMOO, now enables media researchers around the globe to meet and collaborate with their colleagues without ever leaving the comfort of their own offices.

Saffo, Paul. "The Future of 'Virtual' Computer Conferencing Looks as Clear as MUD." *PC Computing* Jan. 1993.  
<telnet://lambda.parc.xerox.com:8888>, @go #50827, press 11  
(20 Nov. 1994).

The business communications picture is looking muddy, and that's good news indeed. I'm talking not about the stuff of childhood puddles but rather about MUD, a novel approach to computer conferencing that emphasizes informal, team-building interactions among communities of users.

Steffen, David. "A Cynic Looks at a MOO." gopher /University of Koeln/MOOs/About MUDs, MOOs & MUSEs in Education/selected papers/A Cynic Looks at MOO (20 Nov. 1994).

Recently, Rob Harper posted a description of a great new concept in computer communication - something called a MOO. It was about a year and a half ago when Rob introduced us to another new technology: WAIS. When I review WAIS back then, I found a system of considerable promise still a little ragged around the edges. In the case of the MOO, I have found a concept of enormous promise which, again, is not quite developed enough to be useful. However, like WAIS, development on the MOO concept is proceeding rapidly and although the average, working biologist will probably not derive full benefit from this system yet, it is time for all interested biologist to begin experimenting with MOOs, so that we can guide its development into the most useful form. In my opinion, those of you in the business of providing computer resources to fellow biologists definitely want to learn about this concept as soon as possible.

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## **Additions to Bibliography of Electronically-Available Sources: MOOs, MUDs, MUCKs, and MUSHs**

**June 1996**

<http://www.cas.usf.edu/english/walker/moos/bib2.html>

